Form C-104 Rev. 10/07

CONSTRUCTION VALUE ENGINEERING CHANGE PROPOSAL MISSOURI DEPARTMENT OF TRANSPORTATION

					Date	2/27/08
Contract ID	071130-805			Job No.	J8S0851	
County Gre	eene	Route 26	56	Original	Bid Cost <u>\$11</u>	,889,618.21
Contractor	APAC-Missouri, Inc.			By Dou	ug Fronick	
Designed By	APAC-Missouri, Inc.			Phone	417-868-6700	
	VE # 08-17					

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages Proposed Ramp 4 Closure.

This proposal is to close existing ramp 4 (west bound Rt. 44 on ramp) during stage 1 construction. The current plans call for leaving ramp 4 open by constructing temporary connections #1 and #2 so the ramp can tied under traffic. With this proposal traffic wanting to go west on Rt. 44 will do so on existing ramp 3. Traffic control plans are already designed for handling west bound traffic on ramp 3 during the I-44 closures. Ramp 4 closure would be permanent during stage 1 until ramp 4 is reconstructed. Advantages to this closure are that stage work and tie-in work can be minimized by diverting traffic away from the work area, employees and equipment are not working as close to traffic as the original plans show, and MODOT will receive a better finished pavement since it will minimize the numbers of headers to construct this section of roadway.

Proposed Temporary Striping Change.

The original plans call for the use of preformed removable marking tape only for the temporary markings. This proposal changes the type of temporary markings to paint and tape. The tape would be used on finished surfaces and areas that the existing pavement would stay in place. The paint would be used on new asphalt pavement that the SP125 surface still has to be laid and on pavement that has to be removed. The paint will also be used on stage 1 of the bridge since the half of the bridge that traffic will be handled on will be removed in stage 2. The temporary striping plans will also be modified to include striping the relocated Rt. 266 with four lanes and a center turn lane. This is similar to how the Rt. 160/West Bypass project was temporary stripe prior to the surface being placed. Striping the roadway with four lanes and a turn lane would allow for better traffic control for median installation once the new roadway is opened. The center turn lane would be laid out the same as the final turn lanes to Golf Rd. and Haseltine Rd. The intent of JSP HH was to not make "ghost lines" on the final pavement surface. Using temporary striping with both paint and tape will give MODOT the same end result at a lower cost to taxpayers and not scar the pavement.

The estimated net savings is \$58,615.43. See attached sheet showing detailed breakdowns of contract items.

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4.	PARITIMATE			1112 (*41115		1.116.16

^{3.} Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.

APAC-Missouri	Inc foresees no	additional	costs for MODOT.
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4.	Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the
	Specifications.

Detailed breakdowns are attached (date)

5.	Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract
	completion time or delivery schedule.

March 11, 2008 No change to completion date or schedule.

(date) (effect)

6. Dates of any previous or concurrent submission of the same proposal.

1/24/08 (date and/or dates)

Additional Comments:

** Portion Below This Line To Be Filled Out by MoDOT **

Comments: I concur with this proposal. It is a revised VE from the original submitted and occounts for cost savings by utilizing paint for temporary striping in locations when it will not cause issues our conflicts with Ruture markeys and the closure of Romp 4 on name to I-44 (WB) and installing a temporary connection to EB to WB I-44 Ramp. Final Savines will BE Determined University Fleed MEASURE MENTS.

Submitted By Resident Engineer

Date

Comments:

Value Engineering Proposal. dot

Approval Recommended Rejection Recommended	District Engineer	<u>3/24/20</u> 08 Date
Comments: Approval Rejection	State Construction and Materials Engineer	4-7-68 Date

Distribution:

Resident Engineer, Project Manager, District Operations Engineer, State Construction and Materials Engineer *Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102

APAC-Missouri, Inc. Rt. 266 Greene County J8S0851

Current Contract

ltem	Description	Quantity	Unit	Unit Price	Total Price
	Bituminous Pavement Mixture PG64-22				
1270	(Base)	182	TN	\$48.90	\$8,919.36
1600	Pavement Edge Treatment	258	LF	\$4.81	\$1,239.06
	Preformed Removable Marking Tape 4"				
1650	White	37,954	LF	\$0.93	\$35,297.22
	Preformed Removable Marking Tape 4"				
1660	Yellow	39,444	LF	\$0.93	\$36,682.92
	Preformed Removable Marking Tape,				
1665	24" White	166	LF	\$5.15	\$854.90
	Preformed Short Term Marking Tape				
1670	Left/Right Arrow		EA	\$206.00	\$206.00
1720	Paint Removal	39,031		\$0.26	\$10,148.06
1730	Tape Removal	23,163	LF	\$0.21	\$4,864.23

TOTAL \$98,211.75

V.E. Proposal

Item	Description	Quantity	Unit	Unit Price	Total Price
	Preformed Removable Marking Tape 4"				
1650	White	7,805	LF	\$0.93	\$7,258.65
	Preformed Removable Marking Tape 4"				
1660	Yellow	7,256	LF	\$0.93	\$6,748.08
	4" White High Build Acrylic Waterborne				
1680	Pavement Marking Paint	28,999	LF	\$0.10	\$2,899.90
	4" Yellow High Build Acrylic Waterborne				
1690	Pavement Marking Paint	35,163	LF	\$0.10	\$3,516.30
	24" White High Build Acrylic Waterborne				
XXX1	Pavement Marking Paint	166		\$2.50	\$415.00
XXX2	Left/Right Arrow-Waterborne Paint		EA	\$55.00	\$385.00
1720	Paint Removal	21,677		\$0.26	\$5,636.02
1730	Tape Removal	10,397	LF	\$0.21	\$2,183.37
	Temporary Raised Pavement Marker,				
1740	Type 2	708	EA	\$2.50	\$1,770.00
	Temporary Raised Pavement Marker,				
XXX3	Type 1	192		\$2.00	\$384.00
XXX5	Mobilization for Temporary Striping	8	EA	\$1,050.00	\$8,400.00

TOTAL \$39,596.32

TOTAL SAVINGS

\$58,615.43

Rt. 266 Greene J8S0851

	UNDERRUN PAVEMENT EDGE TREATMENT						
STAGE	FROM STATION	TO STATION	ROADWAY	LOCATION	PAVEMENT EDG	E TREATMENT	REMARKS
			EXIST. RAMP 4	RT.	100.3	LF	
			EXIST. RAMP 4	RT.	157.3	LF	
			TOTAL	UNDERRUN	257.6	LF	

Rt. 266 Greene J8S0851

	UNDERRUN TEMPORARY PAVEMENT					
STAGE	FROM STATION	TO STATION	LOCATION	BITUMINOUS PAVEMENT PG 64-22 TONS	**	
1	0+00	3+99	TEMP. CONN. # 2	182.4		
			TOTAL UNDERRUN	182.4 TN		

Rt. 266 Greene J8S0851

	Temporary Markings Summary						
4" YELLOW TAPE	4" WHITE TAPE	4" YELLOW PAINT	4" WHITE PAINT	PAINT REMOVAL	TAPE REMOVAL		
7256	7805	35163	28999	21677	10397		

24" White	Left/Right
Paint	Arrow Paint
166	7

Type 1 TRPM	Type 2 TRPM		
192	708		

Rt. 266 Greene J8S0851

TEMPORARY PAVEMENT MARKINGS-STAGE WORK									
STAGE	FROM STATION	TO STATION	LOCATION	4" YELLOW TAPE	4" WHITE TAPE	4" YELLOW PAINT	4" WHITE PAINT	PAINT REMOVAL	TAPE REMOVAL
1	595+85	600+17	EXIST. RT. 266	432	432	432	432	1728	
	600+17	607+50	EXIST. RT. 266			1466	1466		
1	607+50	622+15	EXIST. RT. 266			2930	2930		
1	636+80	648+48	EXIST. RT. 266			2336	2106	4442	
1	648+48	661+43	EXIST. RT. 266			2532	755	3287	
1	660+38	661+88	TEMP. CONN. 1			100	172	601	
	664+50	667+39	RT. 44 BRIDGE			578	578	-	
	667+39	678+00	CL ROUTE 266	646	1228			2452	
II	595+85	600+17	EXIST. RT. 266						864
- 11	667+39	678+00	CL ROUTE 266						1874
il I	0+00	4+23	Temp. Conn #3	140	140	706	706	280	
11	664+50	678+00	CL ROUTE 266	2498	2131			1874	3030
	664+50	678+00	CL ROUTE 266						4629
111	10+40	14+40	CL GOLF ROAD		, ,	800	958		
111	0+00	2+00	TEMP. CONN. #5	200	200				
111	0+00	0+51	TEMP. CONN. #4			102	118		
ill	0+00	3+10.52	BL RAMP 4A			622	622		
111	0+00	2+00	BL RAMP # 5			329	328		
111	641+44	662+13	LT CL ROUTE I- 44	2069	2276			4345	
111	662+13	674+84	LT CL ROUTE I- 44	1271	1398			2668	
			TOTALS	7256	7805	12933	11171	21677	10397
			TOTALO	7200	7 000	12000	11171	210//	10091

Rt. 266 Greene J8S0851

TEMPORA	RY STR	PING PRIC	OR TO S	SURFACI	ON SP250	
LOCATION	FROM STATION	TO STATION	YELLOW PAINT	WHITE PAINT	TYPE OF LINE	
HASELTINE	31+72	35+60	776	776	DOUBLE WHITE / YELLOW	
HASELTINE	30+72	11+42	3860	3860	DOUBLE WHITE / YELLOW	
ROUTE 266 RELOC.	664+14	655+00	1828	1828	DOUBLE WHITE / YELLOW	
ROUTE 266 RELOC.	655+00	644+97		2006	OUTSIDE WHITE	
ROUTE 266 RELOC.	655+00	644+97		100	DASHED WHITE	
ROUTE 266 RELOC.	655+00	644+97	2000		DOUBLE YELLOW	
ROUTE 266 RELOC.	655+00	647+47	1506		DOUBLE YELLOW	
ROUTE 266 RELOC.	644+97	646+47		150	SINGLE WHITE TURN LANE	
ROUTE 266 RELOC.	643+50	630+75		2250	DOUBLE WHITE	
ROUTE 266 RELOC.	643+50	630+75		255	DASHED WHITE	
ROUTE 266 RELOC.	643+50	633+25	2050		DOUBLE YELLOW	
ROUTE 266 RELOC.	641+00	630+75	2050		DOUBLE YELLOW	
ROUTE 266 RELOC.	643+50	642+00		150	SINGLE WHITE TURN LANE	
ROUTE 266 RELOC.	632+25	630+75		150	SINGLE WHITE TURN LANE	
ROUTE 266 RELOC.	628+94	614+21		2946	DOUBLE WHITE	
ROUTE 266 RELOC.	628+94	614+21		295	DASHED WHITE	
ROUTE 266 RELOC.	628+94	614+21	2946		DOUBLE YELLOW	
ROUTE 266 RELOC.	626+44	614+21	2446		DOUBLE YELLOW	
ROUTE 266 RELOC.	628+94	627+44		150	SINGLE WHITE TURN LANE	
ROUTE 266 RELOC.	614+21	612+18	406		DOUBLE YELLOW	
ROUTE 266 RELOC.	614+21	609+68	906		DOUBLE YELLOW	
ROUTE 266 RELOC.	614+21	609+68		906	DOUBLE WHITE	
ROUTE 266 RELOC.	609+68	611+18		150	SINGLE WHITE TURN LANE	
ROUTE 266 RELOC.	608+70	600+17		1706	DOUBLE WHITE	
ROUTE 266 RELOC.	606+20	600+17	1206		DOUBLE YELLOW	
ROUTE 266 RELOC.	606+20	608+70	250		SINGLE WHITE	
ROUTE 266 RELOC.	607+20	608+70		150	SINGLE WHITE TURN LANE	
TOTAL OF 7 ARROWS						
		TOTALS	22230	17828		

MEMORANDUM



Missouri Department of Transportation Construction and Materials District 8

Dervert

TO:

Dave Ahlvers,

State Operations Engineer

FROM:

Jimmy McDiarmid

Operations Engineer - Construction

DATE:

March 24, 2008

SUBJECT:

Value Engineering Proposals

Job No. J8S0851

Route 266, Laclede County Greene

Attached for your review and approval are Value Engineering Proposals from APAC-Missouri, Inc. on the above referenced project. The proposals have been thoroughly reviewed and recommendation is made for approval.

Should you have any questions or concerns, please don't hesitate to contact my office.

Attachment

RECEIVED

RECEIVED

MAR 272008

Construction & Materials - ECR

MAR 282008

Construction & Materials - ECR

MEMORANDUM



Missouri Department of Transportation

District 8 Springfield Construction

TO:

Kirk Juranas

District Engineer

CC:

FROM:

Johnny Teegardin

Resident Engineer

DATE:

March 13, 2008

SUBJECT:

VE Proposal

Job No.:

J8S0851

Route:

266

County:

Greene

Please find enclosed for your review, comments, and recommendation/rejection for the revised VE proposal to close down Ramp 4 during phased construction and temporary striping changes from tape to paint with an estimated cost savings of \$58,615.43 as follows:

- Change temporary marking tape to paint west of the I-44 bridge. Due
 to project bid for bituminous construction, the top lift of asphalt could
 be held to the last phase of the project, thus no markings would have
 to be removed and would not cause ghost markings to remain on the
 project. This reduces both the cost of marking and removals.
- 2. Closure of Ramp 4 (WB Rte 266 to WB I-44) can be accomplished provided the contractor constructs the temporary pavement shown in the turn radius on Ramp 3 (EB Rte 266 to WB I-44) (see Sheet 30 to allow traffic to make the turn from WB 266 to I-44. This will result in the elimination of temporary connection 1 and 2 and still allow access to I-44 from WB Rte 266 and eliminating a need for a detour beyond the project limits. Additional signing would be required redirecting the traffic onto this ramp and would be considered to determine the overall cost savings for this ramp.

Copy: File

jt



Springfield Branch Office

P.O. Box 1187 Springfield, Missouri 65801 (417) 868-6700 • Fax (417) 868-6785

APAC -- Missouri, Inc. • Missouri Division • P.O. Box 1117 • Columbia, Missouri 65205 • (573) 449-0886 • Fax (573) 449-7966

February 27, 2007

MoDOT Dist. #8
Attn: Johnny Teegardin, R.E.
2549 N. Mayfair
Springfield, MO 65803

FEB 2 9 2008

Re:

JOB NO: J8S0795 & J8S0851

Airport Blvd. & Rt. 266, Greene County

Dear Johnny,

Attached are four copies of APAC's Value Engineering Proposal for the temporary striping change and the ramp 4 closure. The proposal is being submitted under section 104.6 of the Missouri Standard Specification for Highway Construction. Please review this proposal and let me know if any additional information is required.

Sincerely,

Doug Fronick

Project Engineer